



US 20170177295A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2017/0177295 A1**
(21) **Bowen** (43) **Pub. Date: Jun. 22, 2017**(54) **MUSIC SYNCHRONIZATION
ARRANGEMENT**(71) Applicant: **APPLE INC.**, Cupertino, CA (US)(72) Inventor: **Adam Bowen**, Palo Alto, CA (US)(21) Appl. No.: **14/977,415**(22) Filed: **Dec. 21, 2015****Publication Classification**(51) **Int. Cl.**
G06F 3/16 (2006.01)
G06F 3/01 (2006.01)
A63B 71/06 (2006.01)
G06F 17/30 (2006.01)(52) **U.S. Cl.**CPC **G06F 3/165** (2013.01); **G06F 17/30312**
(2013.01); **G06F 3/015** (2013.01); **A63B**
71/0686 (2013.01); **G10H 2210/385** (2013.01);
G10H 2210/391 (2013.01); **G10H 2240/081**
(2013.01)

(57)

ABSTRACT

The invention generally pertains to a hand-held computing device. More particularly, the invention pertains to a computing device that is capable of controlling the speed of the music so as to affect the mood and behavior of the user during an activity such as exercise. By way of example, the speed of the music can be controlled to match the pace of the activity (synching the speed of the music to the activity of the user) or alternatively it can be controlled to drive the pace of the activity (increasing or decreasing the speed of the music to encourage a greater or lower pace). One aspect of the invention relates to adjusting the tempo (or some other attribute) of the music being outputted from the computing device. By way of example, a songs tempo may be increased or decreased before or during playing.

